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Engaging Context Data Integration

Data Sources:

https://www.trustmypaper.com/blog/15-terrifying-statistics-on-your-cellphone-addiction

(I would block out the statistic about sex because I would not want that to become a main focus of the lesson)

http://www.communicationstudies.com/teen-cell-phone-statistics-infographic

https://www.bankmycell.com/blog/smartphone-addiction/#chapter1

Background:

One course that I teach is called Problem Solving. It is a course for students who are at risk of not graduating due to their struggles in math and science. We have an open curriculum to teach whatever and however we want to reach these at-risk students and get them some problem-solving skills before they leave high school. Most of our students are entering the work force, not college, and all of them have a strong dislike of math, science, and school in general. It is a constant struggle to try to find topics that interest them, and this data integration assignment really got me thinking about a better way to reach them. Using data about things that they are interested in could help to grab their attention while being able to teach skills in many math, science and problem-solving areas. While I found all of the data from NASA that is available to us extremely interesting, I was having trouble determining how I would be able to integrate those into my classroom. The kids I have just are not interested in that kind of stuff, at least not yet! I began to think about things they do care about and how I could use those topics to not only help their math and science skills, but also get them thinking about issues in the real world. Data integration is an amazing way to do this!

Lesson Enhancement:

The data source I plan to use is a collection of data I found regarding cell phone use and cell phone addiction. My plan is to present this data to students with no real introduction. My initial goal is to just see what students respond to most. I am interested to see if they focus on the big number statistics, if they pay attention to the graphs and charts, and if they are passionate about any of the things being presented to them. I really want this lesson/unit to be led by them, so right off the bad I want to pay attention to what things they focus in on. I also expect they may have some arguments about the “addiction” side of the statistics. That is what I am hoping they get passionate about. I then plan to challenge them to find more data, statistics and research that can back up or fight against what I presented them with.

Interdisciplinary Context:

Throughout this process my goals are for students to better understand what statistics mean, how to read statistics, and how they can better understand where the data came from. Statistics can often be misleading so looking into the sources of these articles and where their data came from will be valuable for my students. I then want them to use that knowledge to go find data and research of their own. This will be a valuable skill for them. Lastly, I would like them to create a final product, which could either be an advertisement warning their peers of cell phone addiction, or a counter-argument to the information I provided on day one. I will not force the class to believe one way or the other because the important part here is for the class to get comfortable with data in all different forms. I believe this activity will mix science and math because science is all about investigation and the collection of data, and math are the tools we use to be able to use and understand the data. I also think that there can be some connections

to some other areas because they will be studying the Psychology behind cell phone addiction which will also involve reading research articles.